

Claims

1. A method for managing demand for a commodity provided by a utility, the utility delivering the commodity to at least one customer site, the customer site having a plurality of devices which use the commodity, including the steps of:
 - providing a plurality of nodes, each node being associated with each device;
 - defining a program having a subset of the plurality of devices for which usage of the commodity may be managed by activating the program;
 - measuring, by the associated nodes, the instantaneous rate at which the commodity is being delivered to the subset of the devices;
 - activating the program and responsively managing usage of the commodity to the subset of devices via the nodes in accordance with the program;
 - determining an actual consumption of the commodity at the at least one customer site during activation of the program.
2. A method, as set forth in claim 1, including the step of subsequently measuring at least one of a rate and a change in the rate at which the commodity is being delivered to the subset of the devices.
3. A method, as set forth in claim 2, including the step of determining an actual capacity of the commodity saved by activating the program.
4. A method, as set forth in claim 3, including the step of providing at least one of an alternate rate and a billing adjustment to at least one customer as a function of the actual consumption at the related customer site during activation of the program.

5. A method, as set forth in claim 4, wherein the at least one of an alternative rate and a billing adjustment is also a function of historical usage information.

6. A method, as set forth in claim 2, including the step of verifying management of the devices within the subset of the devices.

7. A method, as set forth in claim 1, wherein the utility delivers the commodity to a plurality of customer sites, each customer site having a plurality of devices and the step of defining the program includes the step of including within the program all devices of a similar type at each customer site.

8. A method, as set forth in claim 1, including the step of allowing a customer to subscribe to the program.

9. A method, as set forth in claim 1, wherein the program is mandatory.

10. A method, as set forth in claim 1, wherein the utility delivers the commodity to a plurality of customer sites, each customer site having a plurality of devices and the step of defining at least one program includes the step of defining a plurality of programs, each program having a respective subset of the devices.

11. A method, as set forth in claim 10, including the step of determining, in real time, a capacity associated with the delivery of the commodity which may be available for management by one or more of the programs.

12. A method, as set forth in claim 11, including the step of providing a graphical representation of the capacity available.

13. A method, as set forth in claim 1, wherein the commodity is electrical power.
14. A method, as set forth in claim 1, wherein the commodity is water.
15. A method, as set forth in claim 1, wherein the commodity is one of natural, gas and steam.
16. A method, as set forth in claim 1, wherein the step of defining at least one program includes the step of defining a plurality of programs, each program having a respective subset of the devices, the method including the step of providing a search function for identifying at least one program which matches a set of conditions.
17. A method, as set forth in claim 16, wherein the set of conditions includes an available capacity.
18. A method, as set forth in claim 1, including the step of providing a utility interface.
19. A method, as set forth in claim 18, wherein the utility interface is accessible through a web browser.
20. A method, as set forth in claim 1, including the step of automatically activating the program under a predetermined set of conditions.
21. A method, as set forth in claim 1, including the step of managing the subset of devices in response to activation of the program.

22. A method, as set forth in claim 21, wherein the step of managing the subset of devices includes the step of controlling usage of the commodity during a predetermined period of time.

23. A method, as set forth in claim 22, wherein at least one of the devices has an operating setpoint, and wherein the step of controlling the subset of devices includes the step of modifying the setpoint.

24. A method, as set forth in claim 1, including the steps of receiving a supply request and allowing an operator to responsively activate the program.

25. A method, as set forth in claim 24, wherein the supply request includes a request duration, wherein the program may be activated as a function of the request duration.

26. A method, as set forth in claim 1, including the step of downloading to each node, a program schedule containing scheduling information for the program.

27. A method, as set forth in claim 1, including the step of providing a gateway node coupled between the nodes and the utility.

28. A method, as set forth in claim 27, wherein each of the nodes is one of a load metering node, a control node, and a load control node.

29. A system for managing demand for a commodity provided by a utility, the energy provider delivering the commodity to at least one customer site, the customer site having a plurality of devices which use the commodity, comprising:

a utility interface, operable by a user, for defining a program having a subset of the plurality of devices for which usage of the commodity may be managed by activating the program;

a distribution network for delivering the commodity to the subset of devices;

a plurality of nodes, each node associated with a respective device; and,

a control system coupled to the utility interface, the distribution network, and the nodes, for controlling delivery of the commodity during activation of the program via the nodes, and determining, in real time, an actual consumption of the commodity at the least one customer site, during activation of the program.

30. A system, as set forth in claim 29, the control system being adapted to activate the program and the nodes adapted to subsequently measure the rate at which the commodity is being delivered to the subset of the devices.

31. A system, as set forth in claim 30, the control system for determining at least one of an actual rate of consumption of the commodity and a change in a rate of consumption induced by activating of the program.

32. A system, as set forth in claim 31, wherein the control system determines a at least one of an alternative rate and a billing adjustment to at least one customer as a function of the actual consumption at the related customer site by the program.

33. A system, as set forth in claim 32, wherein the at least one of an alternative rate and a billing adjustment is also a function of historical usage information.

34. A system, as set forth in claim 30, wherein the control system verifies management of the devices within the subset of the devices.

35. A system, as set forth in claim 29, wherein the utility delivers the commodity to a plurality of customer sites, each customer site having a plurality of devices and the utility interface allows the user to define a plurality of programs, each program having a respective subset of the devices.

36. A system, as set forth in claim 29, including a gateway node coupled between the nodes and the utility.

37. A method, as set forth in claim 29, wherein each of the nodes is one of a load metering node, a control node, and a load control node.